

MYP Design Year 4

Criterion A: Inquiring and Analyzing


Maximum: 8

- i. Explain and justify the need for a solution to a problem for a specified client/target audience
- ii. Construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem
- iii. Analyse a group of similar products that inspire a solution to the problem
- iv. Develop a detailed design brief, which summarizes the analysis of relevant research

What do you need to do?


1. Explain and justify the need for a solution to a problem for a specified client/target audience

<input type="text"/>	What is the nature of the problem?
<input type="text"/>	Who is it a problem for?
<input type="text"/>	Where is the problem occurring?
<input type="text"/>	What is the cause of the problem?
<input type="text"/>	What effect is the problem having?

 *Strategies to answer the above questions may include (1) identifying a target user by applying brainstorming or mind-mapping techniques, (2) interviewing, surveying and/or polling potential clients, (3) observing, filming and/or photographing users interacting with a product, (4) collecting data from experts to confirm there is a real need for a solution to the problem, (5) seeing the situation from the user's/client's point of view*


2. Construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem

<input type="text"/>	Identify the questions that need to be answered to solve the problem
<input type="text"/>	Identify the relevant data that needs to be collected
<input type="text"/>	Identify where the data will be sourced from
<input type="text"/>	Identify whether sources are primary or secondary
<input type="text"/>	Identify which sources are essential and which are desirable.

 *The nature of and amount of research required will vary depending on the level and the nature of the design problem/challenge. By the end of the course, students should be able to conduct primary, secondary, qualitative and quantitative research.*

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3. Analyse a group of similar products that inspire a solution to the problem


 *Before beginning to develop a specification and designs, you need to identify existing products that solve a similar problem, could partially solve their problem or could give you ideas on how to solve their problem.*

You will need to employ a range of strategies to analyse these products, such as:

- identification of and interaction with similar products when out shopping
- attribute listing of existing products
- SWOT analysis (strengths, weaknesses, opportunities and threats)
- functional analysis
- aesthetic analysis
- graphical disassembly analysis
- performance testing of products
- evaluation of past student projects
- secondary research through product reviews on consumer websites, buying guides or magazines
- summary of customer reviews on commercial websites.
- analysis of a graphic or analysis through sketching of parts.

4. Develop a detailed design brief, which summarizes the analysis of relevant research

 *At this point, you have collected a great deal of data that requires analysis and summary to inform the design of the solution and be useful. The analysis and summary must be presented in a design brief, a series of detailed paragraphs that present only the useful information.*

 *The brief shouldn't solve the problem at this stage, but instead outline what you intends to design to solve the problem, provide answers to each of the research questions, and clarify the essential and desirable features of a solution. It should also state any determined values that the design must meet.*

Students should NOT:	Students should:
<ul style="list-style-type: none">• write large paragraphs of text• include statements that do not relate to solving the problem• make statements without evidence from expert opinion or data• include all of their research within the body of the project.	<ul style="list-style-type: none">• present information concisely• explain how and why the information is relevant to solving the problem• evaluate the validity of the data• present their research in an appendix• cite all sources of information using appropriate conventions.

 *Consider the following:*

- how to write a complete bibliography (or how to use an online citation tool)
- working with the school librarian to check the accuracy of bibliographic referencing